

1           1.    A codec comprising:  
2                a digital interface including a plurality of  
3 stereo channel pairs;  
4                a first pair of digital to analog converters  
5 coupled to one of said stereo channel pairs;  
6                a second pair of digital to analog converters  
7 coupled to another one of said stereo channel pairs;  
8                a pair of analog mixers each outputting a  
9 separate audio program, each of said mixers coupled to one  
10 of said first and second pairs of digital to analog  
11 converters; and  
12               a pair of analog to digital converters coupled to  
13 another one of said stereo channel pairs, one of said  
14 mixers also coupled to said pair of analog to digital  
15 converters.

1           2.    The codec of claim 1 further including a  
2 Sony/Phillips digital interconnect formatter.

1           3.    The codec of claim 1 wherein said digital  
2 interface includes a plurality of programmable ports so  
3 that the connections from the digital interface to said  
4 digital-to-analog converters may be changed.

1           4.    The codec of claim 1 wherein said digital  
2 interface has a programmably changeable output data rate.

1           5.    A processor-based system comprising:  
2                a processor;  
3                an audio accelerator coupled to said processor;  
4                a codec coupled to said audio accelerator, said  
5    codec including a digital interface including a plurality  
6    of stereo channel pairs, a first pair of digital analog  
7    converters coupled to one of said stereo channel pairs, a  
8    second pair of digital-to-analog converters coupled to  
9    another one of said stereo channel pairs and a pair of  
10   analog mixers each outputting a separate audio program,  
11   each of said mixers coupled to one of said first and second  
12   pairs of digital-to-analog converters.

1           6.    The processor-based system of claim 5 wherein  
2    said codec further includes a pair of analog-to-digital  
3    converters coupled to another one of said stereo channel  
4    pairs, one of said mixers also coupled to said pair of  
5    analog-to-digital converters.

1           7.    The processor-based system of claim 6 wherein  
2    said system may simultaneously play one audio program while  
3    recording another audio program.

1           8.    The system of claim 5 wherein said system can  
2    process two separate audio programs at the same time.

1           9.    The processor-based system of claim 5 further  
2 including a Sony/Phillips digital interconnect formatter.

1           10.   The processor-based system of claim 5 wherein  
2 said digital interface includes a plurality of programmable  
3 ports so that the connections from the digital interface to  
4 said digital-to-analog converters may be changed.

1           11.   The processor-based system of claim 5 wherein  
2 said digital interface has a programmably changeable output  
3 data rate.

1           12.   A method comprising:  
2                receiving at least two digital audio programs in  
3 a codec;  
4                converting each of said digital audio programs to  
5 an analog format and mixing each digital program; and  
6                providing an analog output for each audio  
7 program.

1           13.   The method of claim 12 including receiving a  
2 third audio program in a Sony/Phillips digital interconnect  
3 format, formatting said third audio program and outputting  
4 said third audio program.

1           14. The method of claim 12 including outputting each  
2 of said audio programs through a different codec port and  
3 programmably changing the assignment of said programs to  
4 said ports.

1           15. The method of claim 12 including programmably  
2 changing the data rate of at least one of said audio  
3 programs.

1           16. The method of claim 12 including mixing one of  
2 said audio programs in analog format with another analog  
3 signal.

1           17. An article comprising a medium storing  
2 instructions that enable a processor-based system to:  
3           receive at least two digital audio programs;  
4           convert each of said digital audio programs to an  
5 analog format;  
6           output each of said audio programs to a different  
7 port; and  
8           programmably change the assignment of said  
9 programs to said ports.

1           18. The article of claim 17 further storing  
2 instructions that enable said processor-based system to

3 programmably change the data rate of at least one of said  
4 audio programs.

1 19. The article of claim 17 further storing  
2 instructions that enable the processor-based system to play  
3 one audio program while recording another audio program.

1 20. An article comprising a medium storing  
2 instructions that enable a processor-based system to:  
3 receive at least two digital audio programs;  
4 convert each of said digital audio programs to an  
5 analog format; and  
6 programmably change the data rate of at least one  
7 of said audio programs.

1 21. The article of claim 20 further storing  
2 instructions that enable the processor-based system to  
3 output each of said audio programs through a different port  
4 and programmably change the assignment of said programs to  
5 said ports.

1 22. The article of claim 20 further storing  
2 instructions that enable the processor-based system to play  
3 one audio program while recording another audio program.